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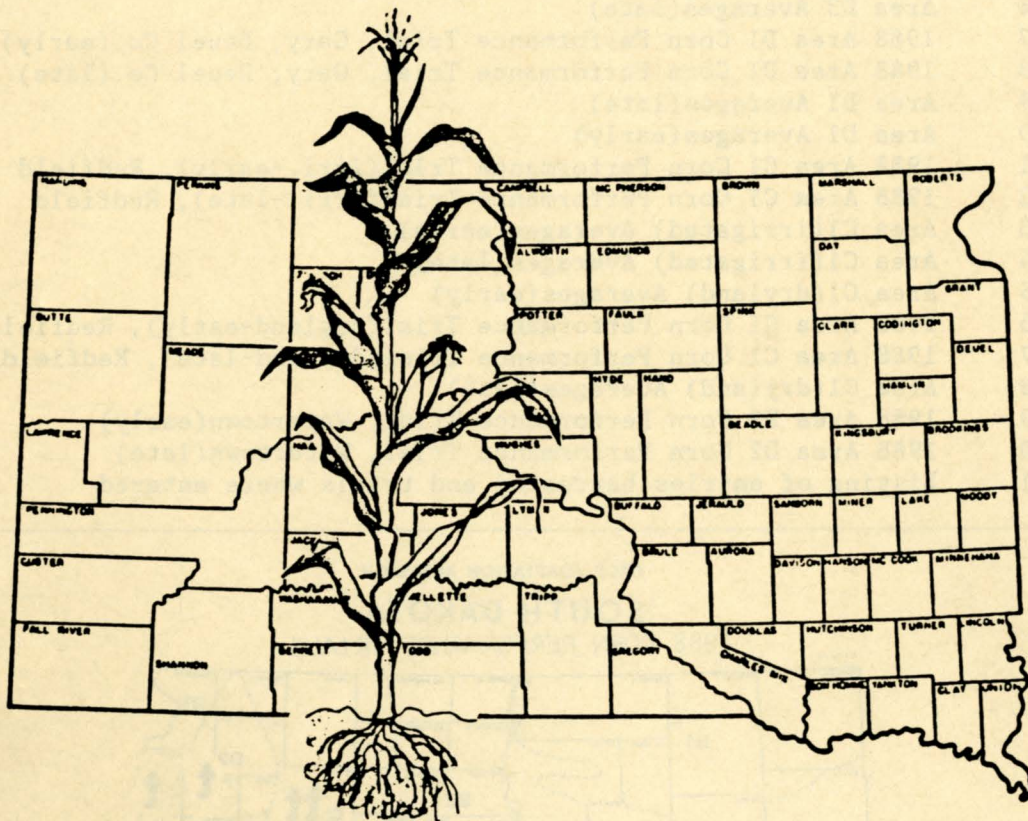
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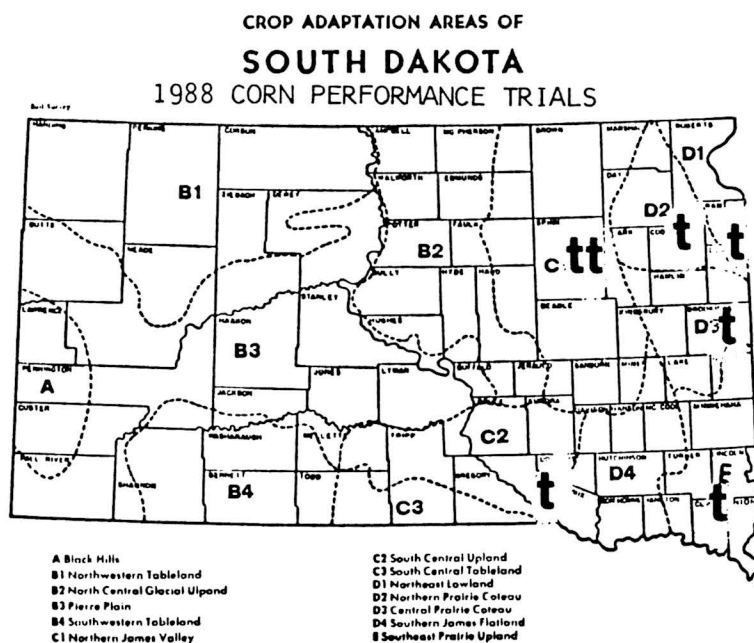
1988 SOUTH DAKOTA CORN PERFORMANCE TRIALS



PLANT SCIENCE DEPARTMENT
AGRICULTURAL EXPERIMENT STATION
SOUTH DAKOTA STATE UNIVERSITY

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1988 CORN PERFORMANCE TRIALS

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The relative performance of corn hybrids grown under similar environmental conditions in 1988 are evaluated in this report. Information in the accompanying tables includes grain yields in bushels per acre, moisture percentages of shelled corn at harvest, performance scores, and other related information. Records of the corn hybrids harvested in 1988 and available two-, three-, and four-year averages of yield, moisture, and stalk lodging percentages are also presented. The trials reported here were conducted under the Plant Science Department program in Crop Performance Testing, Agricultural Experiment Station, South Dakota State University.

Location of the 1988 Trials

Trials were located in the crop adaptation areas marked on the accompanying map of South Dakota. An additional trial (Area D2) was added in 1988 at the Northeast Research Farm in Codington Co., 15 miles north of Watertown. The exact location of each trial and date of seeding and harvesting are included in Table 1. The soil classification, laboratory analyses of soil samples taken, and fertility applied at each site are given in Table 2.

Weather and Climatic Conditions

Climatic data (Table 3) for the 1988 corn growing season, May-September, are based on U. S. Monthly Climatological Data (NOAA) from a station reasonably near each trial site. The Milbank recording station is closest to the field north of Gary in Deuel County. The Watertown data are used for the NE Farm trials. Stations are located at or near the other trial sites, the Pickstown station representing the Geddes trial. Precipitation quantities would vary from the actual site to the recording station but temperatures are similar over a much wider area and considered applicable to the trial area.

Field conditions varied in the eastern portion of South Dakota through most of the growing period. Field work began early and ended early. Good moisture was available for germination and stands were generally uniform, and in the range desired when seeding rates were determined. Growth was good in the early part of the season when above-normal temperatures and ample soil moisture were present. Precipitation was near normal until mid-May in the southern portion of the state, about normal in the south-central until mid-August, and above normal from mid-September to harvest. The remainder of the corn growing area was below normal for precipitation until mid-August when near normal amounts were recorded through harvest, aiding kernel fill of some varieties that had escaped the heat stress problems at pollination. Temperatures averaged 2-5

The assistance of the following individuals is appreciated: Dwayne Beck, D. Sorenson, B. Lawrensen, Lucian Edler, Kevin Kirby, Delbert Robbins, Loyal Evjen and Gary Scholten of the Stations; and John Biddle and John Heaton, farmer-co-operators.

Table 1. Location of Trials, Date of Seeding, and Harvesting of Corn Performance Trials, South Dakota, 1988.

Area	County	Location	Post Office	Dates when	
				Seeded	Harvested
C1-dry	Spink	James Valley Res. Farm, 6E	Redfield	May 5	Oct. 17
C1-irr.	Spink	James Valley Res. Farm, 6E	Redfield	May 5	Oct. 18
C2	Charles Mix	Jack Biddle Farm, 3S, 1E	Geddes	May 13	Oct. 10
D1	Deuel	John Heaton Farm, 1W, 5N	Gary	May 6	Sept. 21
D2	Codington	Northeast Exp. Farm, 15N	Watertown	May 6	Sept. 27
D3	Brookings	Plant Science Farm, 2NE	Brookings	May 2	Oct. 4
E	Clay	Southeast Exp. Farm, 7W, 3S	Beresford	May 4	Oct. 12

degrees above normal during May, 7-9 degrees above in June, 1-3 above in July and August, and about 1 degree below normal through September. October was warm and dry permitting rapid, early harvest of many fields. Killing temperatures were not recorded until October 4 statewide, many hybrids having reached physiological maturity several weeks before freeze. Winds were not a serious problem until mid-October causing some ear droppage and stalk breaking where harvest operations were delayed because all row crops were maturing about the same time.

Because the entire growing season was generally favorable all trials were harvested by mid-October. Yields ranged from excellent to poor. Over 90% of farmers' fields were harvested by the end of October.

Corn borers were a serious problem in some areas. The irrigated trial at Redfield was irrigated with approximately 2 inches of water each time the tensiometer reached 40 cb at the 18-inch depth.

Hybrid Entry Procedure

Hybrids in the trials were entered by the participating companies and they designate the locations where their entries are to be grown. Beginning in 1986, the entries were placed into early or late trials based upon information supplied by the entering company. The arbitrary breaks at each site were 95

Table 2. Laboratory Analysis, Soil Classification and Fertilizer Applied to the 1988 Corn Performance Trials.

Area	Soil Classification	% O.M.	P	K	pH	Preparation and method	pounds/A		
							N	P	K
C1-dry	Beotia SiCl	3.0	25	485	7.5	Disced and ridged(soybeans)	160	40	0
C1-irr.	Beotia SiCl	3.0	25	485	7.5	Disced and ridged(soybeans)	160	40	0
C2	Highmore SiL	2.7	8	285	7.1	Chiseled & disced(g.sorg)	34	18	0
D1	Forman SiCl	2.7	31	575	7.3	Chiseled & disced(sm.grn.)	55	30	0
D2	Kranzburg SiL	3.6	23	160	6.4	Chiseled & disced(sm.grn.)	60	40	0
D3	Lamour SiL	2.9	47	200	6.4	Plowed and disced(sudan)	80	30	20
E	Egan SiL	3.2	18	375	6.9	Plowed and disced(soybeans)	160	60	40

Table 3. Temperature and Precipitation Data for the 1988 Corn Performance Trials, South Dakota.

Location	Type of Data	Months of					Total
		May	June	July	August	Sept.	
Brookings 2 NE	Precip. (inches)	1.54	1.42	1.75	2.94	4.70	12.35
	Temp. (mean)	61.6	72.4	72.5	70.0	58.5	
	Mean Departure	+5.6	+6.8	+1.8	+1.4	-0.2	
	Days 90 F. +	00	07	11	08	00	
	First freeze - October 4						
Centerville 6 SE	Precip. (inches)	2.04	1.45	0.83	5.15	4.15	13.62
	Temp. (mean)	66.0	76.4	75.1	73.0	63.5	
	Mean departure	+5.7	+6.2	+0.2	+0.2	-0.6	
	Days 90 F. +	01	10	15	13	05	
	First freeze - October 4						
Pickstown	Precip. (inches)	1.25	1.26	4.26	2.16	4.13	13.06
	Temp. (mean)	65.6	74.0	77.0	69.5	64.0	
	Mean departure	+5.4	+3.8	+0.1	-4.0	-0.1	
	Days 90 F. +	05	14	18	08	02	
	First freeze - October 4						
Redfield 6 E	Precip. (inches)	3.67	1.12	1.25	3.67	3.99	13.70
	Temp. (mean)	63.1	75.5	75.9	72.5	59.5	
	Mean departure	+5.9	+8.7	+2.8	+1.0	-1.2	
	Days 90 F. +	02	16	16	12	02	
	First freeze - October 4						
Milbank 2 SSW	Precip. (inches)	2.64	1.54	1.46	5.09	2.16	12.89
	Temp. (mean)	63.2	74.3	75.2	71.5	59.5	
	Mean Departure	+5.4	+6.9	+2.7	+0.6	-1.3	
	Days 90 F. +	02	14	14	09	01	
	First freeze - October 4						
Watertown FAA	Precip. (inches)	2.66	0.65	2.75	2.89	2.67	11.62
	Temp. (mean)	63.8	74.8	76.1	72.5	61.0	
	Mean Departure	+8.4	+9.2	+4.9	+3.2	-2.6	
	Days 90 F. +	02	14	14	09	01	
	First freeze - October 4						

days for Areas D1 and D2, 100 days for Areas D3 and C1, and 110 days for Areas C2 and E. A maximum of five entries could be entered by a company, in either the early or late or both trials, at any test site. A fee was charged for each entry in each area except for hybrids included by the Agricultural Experiment Station and each was allowed to be entered once in each adaptation area. A listing of the firms, with brands and hybrids harvested, is presented in Table 31.

Hybrids frequently used by the industry have been used as check entries since 1975. They are indicated in the trials as SDAES Check 1, 4, 10, etc. The identities of the checks are as follows:

Check 1 = B73 x Mo17Ht
Check 4 = W64Ht x W117Ht

Check 9 = Mo17 x A634
Check 10 = A632 x W153R

Changes occur from time to time but the checks are maintained to establish a several-year average before another might be substituted.

Experimental Procedure

Entries included in each trial were seeded in three or more replications. The number of replications depended upon the site and populations under trial. Plots of individual hybrids were located at random within each replication. Available space, soil type and variability, and other factors determined plot size and number of replications. The plot size, populations, and related data are presented in Table 4.

Recommended insecticides were used at some locations for corn rootworm control. The product used depended upon prior history of the field and insecticide used in the past years. A recommended short-residue preemergence herbicide was banded over the row at seeding at all sites.

All trials were seeded as drilled corn. A 31-cell cone seeder was used for all the plots. These units were mounted above commercial maxi-merge units. Seeding rate was 20% more than the number of plants per plot desired. Seedbeds were generally firm and moist, favoring rapid germination. Stands in most of the trials were near the desired population levels.

Table 4. Field Methods

Area	Table No.	Number of Replications Harvested	Final Population Obtained	Row Number of	Description Width, inches	Length feet
C1-D early	26	3	15,720	2	30	26
C1-D late	27	3	15,392	2	30	26
C1-I early	21	3	29,355	2	30	26
C1-I late	22	3	27,602	2	30	26
C2-early	9	3	17,110	2	30	26
C2-late	10	3	17,125	2	30	26
D1-early	17	3	19,439	2	30	28
D1-late	18	3	19,808	2	30	28
D2-early	29	4	17,104	1	36	32
D2-late	30	4	16,940	1	36	32
D3-early	13	4	19,319	1	36	32
D3-late	14	4	19,112	1	36	32
E-early	5	4	20,711	1	30	32
E-late	7	4	20,855	1	30	32

Measurements of Performance

Yield. The yield reported for each hybrid is the average obtained from the yield weights of all replications, expressed as the bushels per acre of No. 2 corn at 15.5% moisture. Varieties of equal potential may yield differently because of variations in slope, soil fertility, and stand. Mathematical determinations have been made to determine whether differences obtained were caused by variations in environment or were true varietal differences. Some coefficients of variation(CV) were greater than desired, not attributable to any one specific cause, though influenced by interactions of soil variations and heat and moisture stress.

To convert data in these tables to the metric system of kilograms or quintals per hectare use the following methods. (The factor 1.121 converts from lbs/A to kg/ha).

- I. 1 B #2 shelled corn = 54 lb.: 1 lb. = .454 kilograms; 1 hectare = 2.471 A; so $54 \times .454 \times 2.471 = 60.6 \times B/A =$ kilograms per hectare.
- II. Or, assuming a yield of 60.6 B/A from the tables;
Step 1 = $60.6 B/A \times 54 \text{ lb/B} = 3272 \text{ lb/A}$
Step 2 = $3272 \text{ lb/A} \times 1.121 = 3668 \text{ kilograms/hectare}$ or
36.7 quintals/hectare.

Moisture Content. The moisture content of each entry is expressed as the percentage of moisture in the shelled corn at time of harvest. Moisture content is inversely related to maturity. Because maturity is of prime importance in South Dakota, these figures are of considerable importance in the evaluation of the trial entries.

Performance Rating. Undue delays should be held to a minimum if farm operations are to be efficient and provide high economic returns. Prevention of harvest operation delays and reduction of additional drying costs are possible if an operator can produce sound, dry corn. Grain yield and moisture percentages are of prime importance. Cash grain operators who do not turn livestock into their fields after harvest will receive greater returns when the stalks remain upright so the ears will go through their harvesting machinery. Because of the importance of the three factors - yield, moisture percentage, and upright stalks - the three results in the tables presenting this information are used to determine a rating or "performance score".

The yields in each test were converted to percentages by comparing them to the mean yield of the test. Similar calculations were made for moisture and stalks broken below the ear at harvest time after first subtracting the moisture content or stalks broken from 100% so that the entries could be ranked according to their ability to produce sound, upright corn rather than soft, lodged corn.

The performance ratings that appear in the tables were computed as follows:

$$\frac{(\text{Yield \%} \times 50) + (\text{Dry matter \%} \times 35) + (\% \text{ upright stalks} \times 15)}{100}$$

Use of the Tables. South Dakota conditions are generally quite different from those in the mid-western Corn Belt. Most of the crop adaptation areas have conditions common to the Northern Great Plains, i.e., limited frost-free growing periods, limited precipitation, and high summer temperatures. Corn hybrids that provide satisfactory yields of harvestable corn that can be stored without additional costly handling are desirable. The performance score provides information on these factors in a weighted fashion or manner.

In choosing a hybrid, first check those which yield the most. Then look for entries with below average moisture and good standability. The results will generally be similar to that of the performance score. Finally, check the performance score over a "several year period", if available, as the average of several years is considerably more reliable than the data from only one year. When seeding a new hybrid the acreage should be limited until the hybrid's adaptation to the environment of the particular farm is known.

Table 5. 1988 Corn Performance Trial, Area E(early), SE Farm, Beresford, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Fontanelle 4035	E 2X	85.6	0.0	0.6	0.0	17.9	1
Hoegemeyer SX2566	E 2X	82.2	0.0	1.3	0.0	16.1	2
Pioneer 3379	M 2X	79.3	0.0	0.0	0.0	21.2	4
Tecnagene DF6805	M 2X	79.0	0.0	0.0	0.0	14.2	3
AgriPro AP525	M 2X	77.3	0.0	0.0	0.0	19.9	5
Hoegemeyer SX2628	M 2X	77.1	0.0	0.0	0.0	20.3	6
Golden Harvest X723	M 2X	74.6	0.0	0.0	0.0	17.8	8
Northrup King S5750	M 2X	74.6	0.0	0.6	0.0	15.6	7
Cargill 6227	M 2X	74.2	0.0	0.0	0.0	20.7	11
Asgrow/O's Gold RX626	L 2X	72.7	0.0	0.0	0.0	14.5	9
Pioneer 3615	M 2X	70.8	0.0	0.7	0.0	12.9	10
Pioneer 3585	M 2X	69.9	0.0	0.7	0.0	12.6	12
Tecnagene DF6807	M 2X	69.8	0.0	1.9	0.0	15.9	13
Lincoln EX 105	M 2X	69.1	0.0	0.0	0.0	17.4	16
Northrup King N4545	M 2X	67.9	0.0	0.0	0.0	13.2	14
SeedTec ST7446	M 2X	67.8	0.0	2.6	0.0	14.3	17
Betagold Karla	M 2X	67.3	0.0	0.0	0.0	13.0	15
Top Farm 1106	M 2X	66.8	0.0	1.9	0.0	14.5	18
Kaltenberg K6300	M 2X	66.0	0.0	0.7	0.0	16.3	21
DeKalb DK535	M 2X	65.4	0.0	1.3	0.0	14.0	20
Terra TR 164E	M 2X	65.0	0.0	0.0	0.0	13.5	19
Golden Harvest X615	M 2X	64.8	0.0	0.0	0.0	20.8	28
Terra TR 1040	M 2X	64.3	0.0	0.7	0.0	18.0	26
Betagold Hanna	M 2X	64.2	0.0	0.0	0.0	13.3	22
Northrup King S5340	M 2X	64.1	0.0	1.3	0.0	18.1	27
Pioneer 3569	M 2X	62.8	0.0	0.0	0.0	13.1	23
Interstate IS543	M 2X	62.6	0.0	0.6	0.0	14.1	24
DeKalb DK547	M 2X	62.5	0.0	0.0	0.0	14.2	25
Curry 1464	M 2X	62.4	0.0	0.0	0.0	17.7	30
Sigco 1814	L 2X	62.1	0.0	0.0	0.0	19.1	34
Interstate IS613	L 2X	62.1	0.0	0.0	0.0	17.8	31
Asgrow/O's Gold RX578	L 2X	62.0	0.0	0.0	0.0	15.9	29
Top Farm 109	M 2X	61.7	0.0	2.5	0.0	18.3	36
S-Brand SS-44	M 2X	61.2	0.0	4.0	0.0	18.6	40
Fontanelle 4230	M 2X	60.7	0.0	0.7	0.0	17.4	37
NC+ 4131	E 2X	60.0	0.0	0.6	0.0	17.4	39
SeedTec ST7440	M 2X	59.9	0.0	0.7	0.0	14.5	33
Fontanelle 4030	E 2X	59.8	0.0	0.0	0.0	14.1	32
Dahlgren DC-535	M 2X	59.5	0.0	0.0	0.0	18.4	42
Tecnagene DF6802	M 2X	59.1	0.0	0.0	0.0	13.6	35
Betagold Maria	M 2X	58.4	0.0	0.0	0.0	18.2	44
Interstate IS593A	L 2X	58.2	0.0	0.7	0.0	17.1	43
Hoegemeyer SX2617	M 2X	58.1	0.0	0.0	0.0	14.7	41
Sigco 1701	M 2X	58.0	0.0	1.3	0.0	13.2	38

Table 5. Area E(early), Beresford, SD (Cont.)

Pfister 2300	M	2X	55.9	0.0	1.3	0.0	18.2	48
Kaltenberg K5200	M	2X	55.1	0.0	0.6	0.0	13.4	46
Garst 8708	M	2X	55.0	0.0	1.3	0.0	12.5	45
AgriPro 680	M	2X	54.8	0.0	0.0	0.0	18.4	50
Hawkeye SX43	M	2X	54.0	0.0	0.0	0.0	18.1	51
AgriPro AP364	M	2X	53.6	0.0	1.3	0.0	14.6	49
Crow's 344	M	2X	53.2	0.0	1.4	0.0	13.0	47
Cargill 6127	M	2X	52.8	0.0	0.0	0.0	16.2	52
Wilson 1500B	M	2X	51.8	0.0	1.4	0.0	18.0	54
Pioneer 3475	M	2X	49.0	0.0	0.7	0.0	12.7	53
Terra TR 103E	M	2X	48.8	0.0	2.1	0.0	13.1	55
Pfister 2250	M	2X	47.9	0.0	0.0	0.0	15.5	56
SDAES Check 4	E	2X	36.2	0.0	10.0	0.0	11.6	57
Means			63.1		0.0		16.0	
LSD(.05)			17.3				CV - 19.7 %	

Table 6. Area E(early) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, Southeast Experiment Farm, Beresford, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
AgriPro 680			97			1			16
Asgrow/O's Gold RX578			117			0			15
Asgrow/O's Gold RX626			122			0			14
Betagold Hanna			106			0			13
Cargill 6127			102			0			15
Crow's 344		106	90		2	1		16	14
Curry SC1480			105			2			17
DeKalb T1100	146	137	109	2	0	0	20	19	17
Fontanelle 4030			101			0			14
Fontanelle 4230			104			0			16
Hoegemeyer SX2566		121	108		1	1		16	15
Interstate IS543			100			0			14
Interstate IS593A			100			1			16
Interstate IS613			101			1			16
Kaltenberg K6300			119			1			15
NC+ 4131			110			0			16
Pioneer 3475	141	125	101	2	0	1	17	16	13
Pioneer 3569			109			0			14
Pioneer 3615			115			0			13
SDAES Check 4		98	72		4	6		15	13
Terra TR1040		119	114		1	0		18	16
Top Farm 109			112			1			16
Top Farm 1106			116			1			14
Wilson 1500B	133	116	103	1	0	1	19	18	16

Table 7. 1988 Corn Performance Trial, Area E(late), SE Farm, Beresford, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Wilson 1670	L 2X	77.3	0.0	0.7	0.0	20.5	1
S-Brand SS-54A	L 2X	77.0	0.0	1.3	0.0	21.4	2
NC+ 4616	M 2X	74.3	0.0	0.0	0.0	20.8	3
Fontanelle 4280	M 2X	72.5	0.0	0.6	0.0	19.9	5
Wilson 1640	L 2X	72.3	0.0	0.0	0.0	19.0	4
Hoegemeyer SX2673	L 2X	71.8	0.0	1.3	0.0	24.4	8
Dahlgren DC-541	L 2X	70.4	0.0	0.0	0.0	19.2	6
Northrup King N6348	L 2X	70.2	0.0	1.3	0.0	20.5	7
Asgrow/O's Gold RX746	L 2X	68.3	0.0	0.0	0.0	19.7	9
Supercrosth/Exp.8110	L 2X	67.3	0.0	0.0	0.0	21.2	10
S-Brand SS-57A	L 2X	64.7	0.0	0.0	0.0	20.3	11
Cargill 7877	L 2X	63.5	0.0	0.6	0.0	20.4	13
Tecnagene DF8812	L 2X	63.2	0.0	0.0	0.0	19.5	12
Horizon 7113	L 2X	62.8	0.0	0.0	0.0	20.9	15
Kaltenberg K7500	L 2X	62.0	0.0	0.0	0.0	19.2	14
Crow's 488	L 2X	61.8	0.0	0.0	0.0	19.7	16
Curry SC1479	L 2X	61.5	0.0	0.0	0.0	21.1	20
Curry SC1480	L 2X	61.4	0.0	0.0	0.0	19.3	17
Jacques 7770	L 2X	61.1	0.0	0.0	0.0	19.4	19
Horizon 7115	L 2X	61.0	0.0	0.0	0.0	18.9	18
Hoegemeyer SX2632	L 2X	59.2	0.0	0.0	0.0	20.0	22
Supercrosth 4386	M 2X	58.6	0.0	0.0	0.0	17.9	21
McCurdy 6660	L 2X	58.6	0.0	0.0	0.0	19.3	23
Jacques 7820	L 2X	57.0	0.0	0.0	0.0	24.2	28
S-Brand SS-62A	L 2X	55.7	0.0	0.0	0.0	22.5	29
DeKalb T1100	L 2X	55.6	0.0	0.0	0.0	19.8	26
Terra TR1125	L 2X	55.4	0.0	0.0	0.0	19.1	25
Supercrosth 2989	L 2X	54.8	0.0	0.6	0.0	17.4	24
Jacques 6770	L 2X	53.9	0.0	0.0	0.0	17.2	27
Cargill 7993	L 2X	50.8	0.0	0.0	0.0	21.7	30
Dahlgren DC-545	L 2X	50.3	0.0	0.7	0.0	22.0	34
Tecnagene DF8814	L 2X	50.1	0.0	0.0	0.0	21.6	32
Interstate IS663	L 2X	49.8	0.0	0.6	0.0	23.0	35
DeKalb DK636	L 2X	49.3	0.0	0.0	0.0	22.2	36
S-Brand SS-60C	L 2X	48.8	0.0	0.0	0.0	18.7	31
Top Farm SX1112	L 2X	47.9	0.0	0.0	0.0	17.4	33
Lincoln 5422	L 2X	46.9	0.0	0.0	0.0	23.7	40
Hawkeye SX56	L 2X	46.8	0.0	0.0	0.0	23.2	39
Interstate IS613	L 2X	46.4	0.0	0.6	0.0	17.7	37
Garst 8555	L 2X	45.5	0.0	0.0	0.0	17.	38

Table 7.(cont) Beresford(late), SD

Cargill 6927	L	2X	44.2	0.0	0.0	0.0	19.0	41
Conti 8707	L	2X	44.2	0.0	1.3	0.0	24.1	42
Northrup King S7751	L	2X	42.9	0.0	0.0	0.0	23.1	44
Keltenberg K7400	L	2X	42.4	0.0	0.0	0.0	21.6	43
SDAES Check 1	L	2X	38.8	0.0	0.0	0.0	23.5	46
Golden Harvest H2486	L	2X	38.1	0.0	0.0	0.0	15.6	45
NC+ 5990	L	2X	37.6	0.0	0.7	0.0	22.3	47
Terra TR1120	L	2X	34.9	0.0	0.0	0.0	22.7	48
Means			56.4		0.2		20.5	
LSD(.05)			17.2			CV	-	21.9 %

Table 8. Area E(late) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, Southeast Experiment Farm, Beresford, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Crow's 488			120			1			18
Dahlgren DC545			113			0			19
DeKalb DK636	147	138	114	1	1	1	22	21	20
Fontanelle 4280		121	95		1	1		20	18
Hoegemeyer SX2632			113			0			18
Interstate IS613			93			1			16
Kaltenberg K7400			105			0			19
Kaltenberg K7500			112			1			17
NC+ 5990			110			1			20
Northrup King S5340	135	119	106	1	0	1	19	8	16
Northrup King S7751		136	117		0	1		22	20
SDAES Check 1	120	105	84	2	2	2	23	22	20
Supercroft 2989		125	101		0	0		18	16
Terra TR1120			116			1			20
Wilson 1640		140	119		1	2		19	17

Table 9. 1988 Corn Performance Trial, Area C2(early), Geddes, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Asgrow/O's Gold RX578	L 2X	63.7	0.0	1.3	0.0	15.5	1
Northrup King N4545	M 2X	59.3	0.0	0.0	0.0	13.5	2
Top Farm SX1102	M 2X	57.6	0.0	1.3	0.0	15.0	3
Garst 8708	L 2X	56.5	0.0	0.0	0.0	14.6	6
Tecnagene DF6807	M 2X	56.4	0.0	0.0	0.0	14.0	5
Pioneer 3585	M 2X	56.3	0.0	0.0	0.0	13.6	4
SeedTec ST7344	M 2X	51.9	0.0	0.0	0.0	13.8	7
Sigco 1701	M 2X	51.9	0.0	0.0	0.0	14.6	8
Lincoln EX105	M 2X	51.6	0.0	0.0	0.0	16.8	10
Horizon 4111	L 2X	51.4	0.0	0.0	0.0	18.6	12
AgriPro AP364	M 2X	50.6	0.0	0.6	0.0	13.5	9
Dahlgren DC-527	M 2X	49.9	0.0	0.0	0.0	15.1	13
Top Farm SX1099	M 2X	49.5	0.0	0.0	0.0	13.2	11
Terra TR164E	M 2X	49.5	0.0	0.0	0.0	15.0	14
Tecnagene DF6803	M 2X	48.1	0.0	0.0	0.0	15.7	15
Pioneer 3615	M 2X	48.0	0.0	0.0	0.0	15.9	17
Pioneer 3475	M 2X	47.7	0.0	0.7	0.0	14.6	16
Sigco 1814	L 2X	47.0	0.0	0.0	0.0	18.7	21
Terra TR1040	M 2X	46.9	0.0	1.3	0.0	19.3	22
NC+ 4131	M 2X	46.0	0.0	0.0	0.0	18.4	24
Pioneer 3569	M 2X	45.4	0.0	0.0	0.0	13.4	19
Top Farm SX1101	M 2X	45.4	0.0	0.0	0.0	13.1	18
Hoegemeyer SX2559	M 2X	45.3	0.0	0.0	0.0	13.3	20
McCurdy 86-21	E 2X	44.9	0.0	1.4	0.0	16.3	25
Wilson 1500B	M 2X	44.7	0.0	0.6	0.0	19.3	28
SeedTec ST6800	L 2X	44.7	0.0	0.6	0.0	18.2	26
Horizon 6101	M 2X	44.6	0.0	0.0	0.0	14.1	23
Cargill 6127	M 2X	44.4	0.0	0.6	0.0	19.1	29
Interstate IS613	M 2X	44.2	0.0	0.0	0.0	17.3	27
Tecnagene DF6805	M 2X	42.4	0.0	0.0	0.0	14.3	30
Conti 8650	M 2X	42.1	0.0	1.9	0.0	15.7	31
Interstate IS543	M 2X	42.1	0.0	2.7	0.0	16.0	32
AgriPro 680	L 2X	41.8	0.0	0.6	0.0	18.7	37
Cargill 5927	M 2X	41.7	0.0	0.0	0.0	17.8	35
McCurdy 4925	E 2X	41.6	0.0	0.0	0.0	15.5	33
S-Brand SS-44	M 2X	41.5	0.0	0.0	0.0	17.9	36
Hoegemeyer SX2566	E 2X	40.4	0.0	0.0	0.0	17.0	38
SDAES Check 10	E 2X	40.2	0.0	0.7	0.0	13.2	34
Terra TR103E	M 2X	39.1	0.0	0.0	0.0	14.6	39
DeKalb DK524	M 2X	39.1	0.0	2.0	0.0	15.0	40
Cargill 6227	M 2X	37.7	0.0	0.7	0.0	19.1	41
Interstate IS593A	E 2X	37.6	0.0	0.0	0.0	19.2	42
Pioneer 3379	L 2X	36.8	0.0	0.7	0.0	20.2	43
DeKalb DK547	M 2X	35.2	0.0	1.3	0.0	17.4	44
AgriPro AP525	L 2X	32.5	0.0	0.6	0.0	21.4	45

Means

46.1

0.4

16.1

LSD(.05)

12.6

CV - 16.9 %

Table 10. 1988 Corn Performance Trial, Area C2(late), Geddes, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
NC+ 4616	L 2X	70.4	0.0	0.6	0.0	20.4	1
Dahlgren DC-541	L 2X	70.1	0.0	0.0	0.0	20.3	2
Wilson 1670	L 2X	68.7	0.0	0.0	0.0	20.2	4
Tecnagene DF8812	L 2X	68.4	0.0	0.0	0.0	19.1	3
S-Brand SS-57A	L 2X	68.3	0.0	0.0	0.0	20.6	5
Supercroft 4386	M 2X	66.8	0.0	0.6	0.0	19.6	6
Terra TR1125	L 2X	64.9	0.0	0.0	0.0	19.3	7
Supercroft 2989	L 2X	60.8	0.0	0.0	0.0	19.4	8
Top Farm SX1103	L 2X	59.5	0.0	0.0	0.0	16.9	9
Green Acres 3000	L 4X	58.7	0.0	0.6	0.0	21.9	14
Wilson 1640	L 2X	58.1	0.0	0.0	0.0	17.7	11
SDAES Check 9	L 2X	58.0	0.0	0.0	0.0	18.4	12
Cargill 7877	L 2X	57.8	0.0	0.7	0.0	20.0	15
Hoegemeyer SX2617	M 2X	57.6	0.0	0.0	0.0	15.1	10
S-Brand SS-60C	L 2X	57.0	0.0	1.3	0.0	19.7	17
Green Acres 3004	L 4X	56.8	0.0	2.0	0.0	20.8	20
McCurdy 5750	L 2X	56.8	0.0	0.0	0.0	16.3	13
Top Farm SX1106	M 2X	56.6	0.0	0.0	0.0	18.4	16
Northrup King S5340	L 2X	56.2	0.0	0.0	0.0	19.3	19
S-Brand SS-62A	L 2X	55.2	0.0	1.9	0.0	19.9	21
Asgrow RX626	L 2X	55.1	0.0	0.0	0.0	16.0	18
DeKalb DK636	L 2X	54.6	0.0	0.7	0.0	22.4	22
Northrup King S7751	L 2X	53.2	0.0	0.0	0.0	23.9	23
Garst 8555	M 2X	50.1	0.0	0.0	0.0	18.8	24
Tecnagene DF8814	L 2X	50.0	0.0	0.0	0.0	23.6	26
Dahlgren DC-535	M 2X	48.3	0.0	0.0	0.0	19.2	25
Supercroft Exp.8110	L 2X	48.3	0.0	0.0	0.0	20.5	27
NC+ 5990	L 2X	46.0	0.0	0.0	0.0	24.5	28
Interstate 663	L 2X	44.6	0.0	0.0	0.0	25.1	30
Cargill 7993	L 2X	42.5	0.0	1.3	0.0	24.3	31
Interstate 613	L 2X	42.1	0.0	0.0	0.0	18.9	29
Lincoln 5422	L 2X	42.1	0.0	2.6	0.0	24.6	32
Terra TR1120	L 2X	39.3	0.0	0.0	0.0	27.2	33
Green Acres 2179	L 4X	33.3	0.0	0.0	0.0	24.0	34
S-Brand SS-54A	L 2X	30.5	0.0	0.0	0.0	19.8	35
Green Acres 3318	L 4X	23.8	0.0	10.3	0.0	26.9	36
Green Acres 927	L 2X	16.5	0.0	11.0	0.0	29.2	37
Means		52.6		0.9		20.9	
LSD(.05)		15.0				CV - 17.6 %	

Table 11. Area C2(early) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, John Biddle Farm, Geddes, SD.

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Asgrow/O's Gold RX578			99			1			22
Cargill 6127		95	96		1	0		22	23
DeKalb DK524		90	84		2	1		19	20
DeKalb DK547			84			1			22
Hoegemeyer SX2566		95	91		0	0		19	20
Horizon 4111		101	107		1	0		21	22
Horizon 6101			92			0			19
Interstate IS543			92			1			20
Interstate IS593A			89			0			25
NC+ 4131			90			1			23
Pioneer 3475	114	97	91	0	0	0	19	19	20
Pioneer 3569			100			0			19
Pioneer 3615			95			0			19
SDAES Check 10	90	81	76	2	2	1	17	16	17
SeedTec ST6800		96	92		0	1		21	22
Terra TR103E			79			0			19
Top Farm SX1099	102	84	82	0	0	0	17	16	17
Top Farm SX1102			94			1			18

Table 12. Area C2(late) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, John Biddle Farm, Geddes, SD.

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
DeKalb DK636	110	98	97	0	0	0	27	26	27
Interstate IS613			90			1			24
McCurdy 5750			100			0			22
NC+ 5990			92			0			28
Northrup King S5340			98			0			23
SDAES Check 9	107	95	88	1	0	0	21	21	23
Top Farm SX1106			95			0			21
Wilson 1640		97	96		0	0		23	24

Table 13. 1988 Corn Performance Trial, Area D3(early), Brookings, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score	Rating
Golden Harvest X708	E 2X	75.8	0.0	0.6	0.0	18.8	1	
Pioneer 3737	M 2X	70.1	0.0	0.6	0.0	18.1	2	
Pioneer 3585	E 2X	67.6	0.0	1.2	0.0	20.0	3	
Tecnagene DF4894	M 2X	65.2	0.0	0.0	0.0	18.5	4	
Dahlgren DC-440	E 2X	63.7	0.0	0.0	0.0	19.0	5	
Betagold Karla	M 2X	62.4	0.0	0.0	0.0	21.4	6	
Terra TR95E	E 2X	59.8	0.0	0.0	0.0	17.7	7	
Golden Valley 2981	M 2X	59.7	0.0	0.0	0.0	20.5	8	
Northrup King N4350	M 2X	58.0	0.0	1.2	0.0	17.9	9	
Hoegemeyer SX2559	E 2X	57.0	0.0	0.6	0.0	17.3	10	
SeedTec ST7255	E 2X	56.9	0.0	0.0	0.0	20.9	12	
Sigco 1701	M 2X	56.6	0.0	0.6	0.0	22.1	14	
AgriPro AP148	E 2X	56.3	0.0	0.0	0.0	17.7	11	
Pioneer 3751	E 2X	55.6	0.0	0.0	0.0	19.9	13	
Interstate IS543	E 2X	55.5	0.0	0.0	0.0	22.4	16	
Terra TR975	E 2X	55.2	0.0	0.6	0.0	21.1	15	
Hoegemeyer SX2566	E 2X	54.0	0.0	0.0	0.0	20.8	18	
Pioneer 3615	E 2X	53.9	0.0	0.0	0.0	20.9	19	
Interstate IS523	M 2X	53.8	0.0	0.6	0.0	19.5	17	
Northrup King N3624	E 2X	53.1	0.0	0.0	0.0	20.7	21	
Sigco 1799	M 2X	52.8	0.0	0.6	0.0	21.4	22	
Cargill 3477	E 2X	52.6	0.0	0.6	0.0	18.5	20	
Asgrow/O's Gold RX406	E 2X	51.0	0.0	0.6	0.0	17.6	23	
Supercrost 1637	E 2X	51.0	0.0	1.2	0.0	18.4	24	
Interstate IS443	E 2X	50.6	0.0	0.6	0.0	19.3	25	
Tecnagene DF4893	M 2X	48.8	0.0	0.0	0.0	19.1	26	
Crow's 195	E 2X	47.6	0.0	0.0	0.0	24.6	29	
Garst 8882	E 2X	46.5	0.0	0.6	0.0	20.0	28	
SeedTec ST3400	E 2X	45.9	0.0	5.3	0.0	16.9	27	
Horizon 4090	E 2X	45.3	0.0	4.3	0.0	19.1	30	
Betagold Ingrid	E 2X	44.6	0.0	0.6	0.0	18.9	31	
DeKalb DK-464	E 2X	44.5	0.0	0.6	0.0	21.2	33	
Garst 0882	E 2X	44.0	0.0	0.0	0.0	20.4	34	
AgriPro AP175	M 2X	43.9	0.0	0.0	0.0	19.1	32	
Crow's 175	E 2X	41.5	0.0	0.0	0.0	20.7	36	
Cargill 3327	E 2X	41.3	0.0	0.0	0.0	19.0	35	
Golden Harvest H2343	E 2X	40.3	0.0	0.0	0.0	22.1	38	
Golden Valley 2960	M 2X	39.7	0.0	1.2	0.0	19.8	37	
DeKalb DK-415	E 2X	39.0	0.0	0.0	0.0	20.9	39	
DeKalb DK-435	E 2X	37.0	0.0	1.2	0.0	20.6	40	
Terra TR880	E 2X	34.4	0.0	0.6	0.0	20.9	41	
SDAES Check 10	E 2X	31.6	0.0	0.6	0.0	21.0	42	
Asgrow/O's Gold RX498	M 2X	26.2	0.0	0.0	0.0	23.2	43	
Means		152.7		0.4		16.8		
LSD(.05)		15.8	CV		-	7.9 %		

Table 14. 1988 Corn Performance Trial, Area D3(late), Brookings, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Golden Harvest X723	M 2X	82.2	0.0	0.0	0.0	22.9	1
Asgrow/O's Gold RX746	L 2X	76.8	0.0	0.0	0.0	27.3	2
Garst 8708	M 2X	70.6	0.0	0.6	0.0	21.4	3
Tecnagene DF6802	M 2X	69.6	0.0	0.0	0.0	20.6	4
Jacques 5700	M 2X	68.4	0.0	0.6	0.0	23.2	6
Jacques 4900	M 2X	67.6	0.0	0.0	0.0	19.4	5
Curry SC1423	E 2X	66.7	0.0	0.6	0.0	20.7	7
Curry SC1446	M 2X	66.1	0.0	0.0	0.0	21.9	8
S-Brand SS-44	L 2X	64.9	0.0	0.0	0.0	28.5	17
Cargill 5927	M 2X	64.8	0.0	0.0	0.0	28.3	16
Tecnagene DF6807	M 2X	64.6	0.0	0.0	0.0	22.0	9
Custom CFS 5510	M 2X	63.8	0.0	0.6	0.0	21.5	10
Cargill 5157	M 2X	63.5	0.0	0.6	0.0	24.7	14
S-Brand SS-43A	M 2X	63.5	0.0	0.0	0.0	23.5	11
AgriPro AP364	L 2X	62.6	0.0	0.0	0.0	22.2	12
Interstate 543	M 2X	62.2	0.0	0.0	0.0	22.1	13
Northrup King S4590	L 2X	62.0	0.0	0.6	0.0	23.1	18
Terra TR 1040	M 2X	61.9	0.0	0.0	0.0	27.3	22
Supercrost 2245	M 2X	61.7	0.0	0.0	0.0	22.0	15
McCurdy 5750	M 2X	61.4	0.0	0.0	0.0	28.0	23
Northrup King N4545	M 2X	60.9	0.0	0.6	0.0	22.6	19
SeedTec ST7344	M 2X	60.0	0.0	0.0	0.0	21.8	20
Betagold Hanna	L 2X	59.8	0.0	0.0	0.0	22.7	21
Conti 8650	M 2X	58.2	0.0	0.0	0.0	22.5	24
Garst 8808	E 2X	57.6	0.0	0.0	0.0	21.5	25
Dahlgren DC-502	M 2X	56.5	0.0	1.2	0.0	20.7	26
Interstate 593A	L 2X	54.3	0.0	0.6	0.0	27.6	32
Horizon 6101	M 2X	54.2	0.0	0.6	0.0	21.7	27
Crow's 210	E 2X	54.0	0.0	0.6	0.0	23.0	28
McCurdy 86-21	M 2X	53.9	0.0	1.2	0.0	24.3	30
Cargill 4227	M 2X	53.6	0.0	1.2	0.0	24.2	31
McCurdy 4925	M 2X	53.2	0.0	0.0	0.0	23.4	29
Hoegemeyer SX2617	M 2X	52.1	0.0	0.0	0.0	24.6	33
Curry SC1445	M 2X	50.4	0.0	0.0	0.0	26.0	34
SeedTec ST7440	M 2X	47.7	0.0	0.6	0.0	22.7	35
Terra TR 103E	M 2X	45.0	0.0	0.6	0.0	23.8	36
Supercrost Exp.8110	M 2X	41.3	0.0	1.2	0.0	29.0	38
Custom CFS W4052	M 2X	40.1	0.0	0.0	0.0	22.9	37
Tecnagene DF6805	M 2X	31.8	0.0	0.0	0.0	24.7	39
SDAES Check 9	L 2X	29.0	0.0	0.0	0.0	27.1	40
Means		58.5		0.3		20.1	
LSD(.05)		16.3				CV - 19.9 %	

Table 15. Area D3(early) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, Plant Science Farm, Brookings, SD.

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Agripro AP175			102			0			18
Asgrow/O'Gold RX406			102			0			17
Asgrow/O'Gold RX498			96			0			20
Betagold Ingrid			106			0			17
DeKalb DK415		100	94		0	0		19	18
DeKalb DK464			99			1			19
Hoegemeyer SX2559			112			0			16
Hoegemeyer SX2566		116	115		1	0		21	19
Horizon 4090	110	102	101	3	3	2	18	18	17
Interstate IS523			103			0			18
Interstate IS543			114			0			21
Northrup King									
N4350	109			1			17		
Pioneer 3737	127	124	114	1	1	1	19	18	17
SDAES Check 10	99	90	91	2	2	1	20	20	19
SeedTec KX3400		107	101		2	3		18	17

Table 16. Area D3(late) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, Plant Science Farm, Brookings, SD.

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Agripro AP364			113			0			21
Cargill 5157			121			1			21
Crow's 210			102			1			21
Curry SC1423			118			0			19
Custom CFS W4052			101			0			21
Horizon 6101		113	108		2	1		22	21
Interstate IS543			117			0			21
Interstate IS593A			113			0			24
McCurdy 5750	113	106	114	2	3	0	26	26	25
SDAES Check 9	95	87	89	0	0	0	27	26	25
SeedTec ST7440			114			0			22
Terra TR1040			118			1			25

Table 17. 1988 Corn Performance Trial, Area D1(early), Deuel Co., SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Garst 8882	E 2X	73.5	0.0	0.6	0.0	20.0	1
Cargill 3477	E 2X	71.3	0.0	0.0	0.0	19.0	2
SeedTec ST7212	E 2X	69.6	0.0	1.1	0.0	18.6	3
Interstate IS443	E 2X	67.0	0.0	1.1	0.0	22.1	11
Betagold Ingrid	E 2X	66.7	0.0	1.2	0.0	19.2	7
Custom CFS 2223	E 2X	66.7	0.0	0.0	0.0	19.7	8
Top Farm SX1195	E 2X	66.6	0.0	0.0	0.0	18.7	5
Garst 8939	E 2X	66.2	0.0	0.6	0.0	17.6	4
Northrup King N3624	E 2X	65.6	0.0	0.0	0.0	17.1	6
Asgrow/O's Gold RX406	E 2X	65.4	0.0	0.0	0.0	17.6	9
Conti 8455	E 2X	65.4	0.0	0.6	0.0	21.1	12
Cargill 3027	E 2X	65.0	0.0	1.7	0.0	17.6	10
Pioneer 3615	M 2X	64.3	0.0	0.0	0.0	22.1	17
Phoenix PH2391	E 2X	64.2	0.0	0.0	0.0	19.8	13
Northrup King N4350	E 2X	63.9	0.0	1.1	0.0	19.5	15
Sigco 1793	E 2X	63.4	0.0	0.0	0.0	19.1	16
Pioneer 3772	E 2X	62.5	0.0	0.0	0.0	17.2	14
Horizon 4090	E 2X	61.0	0.0	0.6	0.0	17.3	18
Golden Valley 2921	M 2X	60.7	0.0	0.0	0.0	23.5	22
Top Farm SX1195A	E 2X	60.6	0.0	0.0	0.0	19.3	20
Interstate IS463	E 2X	60.3	0.0	0.0	0.0	17.1	19
Jacques 4170	E 2X	58.2	0.0	0.0	0.0	21.0	24
Sigco 1588	E 2X	58.1	0.0	0.0	0.0	15.9	21
Custom CFS 93031	E 2X	58.1	0.0	0.0	0.0	22.2	28
Cargill 3327	E 2X	57.9	0.0	0.0	0.0	23.0	29
Interstate IS406	E 2X	57.8	0.0	0.0	0.0	18.6	23
Conti 8304	E 2X	57.5	0.0	2.3	0.0	19.1	26
Golden Valley 282	M 2X	57.5	0.0	1.3	0.0	19.8	27
Dahlgren DC-440	E 2X	57.5	0.0	0.0	0.0	19.8	25
DeKalb DK415	E 2X	56.6	0.0	0.0	0.0	20.5	30
AgriPro AP175	M 2X	54.2	0.0	0.6	0.0	23.0	33
Pioneer 3751	E 2X	53.8	0.0	0.6	0.0	19.2	31
Phoenix PH2432	M 2X	53.0	0.0	0.6	0.0	18.9	32
Betagold Erika	E 2X	49.6	0.0	2.2	0.0	16.9	34
DeKalb DK464	E 2X	49.5	0.0	1.1	0.0	22.1	36
AgriPro AP148	E 2X	48.6	0.0	0.6	0.0	18.7	35
Golden Valley 247	E 2X	46.1	0.0	0.6	0.0	18.4	37
Jacques 4700	E 2X	45.7	0.0	0.0	0.0	19.7	38
AgriPro 270	E 2X	44.0	0.0	0.0	0.0	17.6	39
SDAES Check 10	E 2X	44.0	0.0	1.2	0.0	24.0	40
Asgrow/O's Gold RX498	E 2X	40.0	0.0	0.0	0.0	28.2	42
SeedTec ST3400	E 2X	38.0	0.0	1.2	0.0	17.6	41
Means		58.5		0.9		19.7	

LSD(.05)

N.S.

CV - 21.0 %

Table 18. 1988 Corn Performance Trial, Area D1(late), Deuel Co., SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Top Farm SX1102	M 2X	80.3	0.0	0.0	0.0	23.0	1
Garst 8808	M 2X	70.1	0.0	0.0	0.0	19.8	2
Cargill 5157	M 2X	69.7	0.0	0.6	0.0	31.0	8
Top Farm SX1099	E 2X	69.0	0.0	0.0	0.0	19.4	3
AgriPro AP364	M 2X	67.3	0.0	0.0	0.0	24.4	7
Dahlgren DC-502	M 2X	66.3	0.0	0.0	0.0	22.1	6
Golden Valley 2981	M 2X	66.1	0.0	1.7	0.0	21.0	5
Supercroft 2445	L 2X	65.5	0.0	0.6	0.0	25.8	10
Supercroft 2277	L 2X	65.2	0.0	3.4	0.0	22.6	9
Top Farm SX1101	M 2X	65.2	0.0	0.6	0.0	19.5	4
Cargill 4227	M 2X	65.0	0.0	0.0	0.0	25.2	11
Interstate 543	M 2X	64.2	0.0	0.6	0.0	26.3	12
Betagold Karla	M 2X	61.9	0.0	1.1	0.0	23.8	14
Asgrow RX578	M 2X	60.8	0.0	0.0	0.0	29.2	15
Garst 0882	M 2X	60.5	0.0	0.6	0.0	19.9	13
Golden Valley 2960	M 2X	52.9	0.0	1.1	0.0	19.6	16
Interstate 523	M 2X	50.3	0.0	0.6	0.0	24.1	17
DeKalb DK524	M 2X	46.5	0.0	0.0	0.0	24.6	18
Custom CFS W4052	M 2X	46.2	0.0	0.0	0.0	24.8	19
SDAES Check 9	L 2X	44.2	0.0	0.0	0.0	29.7	20
Means		61.9		0.5		23.8	

LSD(.05)

N.S.

CV - 20.4 %

Table 19. Area D1(late) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, John Heaton Farm, Deuel Co., SD.

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
DeKalb DK524		87	90		3	1		22	21
Interstate IS523			75			2			20
Interstate IS543			94			1			22
SDAES Check 9	97	85	95	2	1	0	26	25	25
Top Farm SX1099	104	93	89	1	1	1	19	19	18
Top Farm SX1102			110			0			20

Table 20 . Area D1(early) 1985-1988 Yield, Moisture and Stalk Lodging Averages of Corn Hybrids, John Heaton Farm, Deuel Co., SD.

Asgrow/O'Gold RX406			92			0			16
Asgrow/O'Gold RX498			94			0			22
Betagold Ingrid		94	110		7	1		18	17
Dahlgren DC440			98			1			17
DeKalb DK415			93			0			18
DeKalb DK464			96			1			19
Golden Valley GV247			90			0			16
Horizon 4090		90	97		5	1		17	16
Interstate IS463			89			0			16
Northrup King N4350			102			1			18
SDAES Check 10	87	72	80	4	6	2	21	21	20
SeedTec KX3400	94	82	85	2	1	1	17	17	16
Top Farm SX1195		89	88		5	0		18	17

Table 21. 1988 Corn Performance Trial, Area C1(Irrigated-early), Redfield , SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Betagold Karla	M 2X	189.6	0.0	0.0	0.0	18.3	1
Sigco 1799	M 2X	173.8	0.0	0.0	0.0	19.3	5
Cargill 3327	E 2X	173.3	0.0	0.0	0.0	17.2	3
Pioneer 3751	E 2X	172.9	0.0	0.0	0.0	15.6	2
Northrup King N4350	E 2X	171.2	0.0	0.0	0.0	17.8	6
Top Farm SX1102	M 2X	171.2	0.0	0.7	0.0	18.4	7
Garst 8882	E 2X	168.1	0.0	0.4	0.0	14.7	4
Asgrow/O's Gold RX498	M 2X	166.6	0.0	0.0	0.0	19.0	12
Interstate IS543	M 2X	165.8	0.0	0.0	0.0	19.8	15
Pioneer 3615	M 2X	165.2	0.0	0.0	0.0	19.0	14
Interstate IS523	E 2X	164.7	0.0	0.0	0.0	17.5	11
Northrup King N3624	E 2X	164.5	0.0	0.0	0.0	14.5	8
AgriPro AP175	M 2X	163.7	0.0	0.0	0.0	16.5	9
Cargill 3027	E 2X	162.2	0.0	0.0	0.0	15.5	10
Pioneer 3737	E 2X	161.9	0.0	0.0	0.0	17.1	16
Northrup King S4502	M 2X	161.6	0.0	0.0	0.0	17.8	17
Betagold Kristine	E 2X	160.8	0.0	0.0	0.0	18.9	20
Terra TR95E	E 2X	160.5	0.0	0.0	0.0	15.2	13
Sigco 1793	E 2X	157.6	0.0	0.0	0.0	15.5	18
Interstate IS463	E 2X	157.3	0.0	0.0	0.0	15.8	19
Asgrow/O's Gold RX406	E 2X	157.1	0.0	0.0	0.0	16.6	21
Terra TR975	E 2X	156.4	0.0	0.0	0.0	19.7	25
DeKalb DK464	E 2X	156.4	0.0	0.0	0.0	17.9	22
Top Farm SX1101	M 2X	153.5	0.0	0.4	0.0	18.5	29
Sigco 1701	M 2X	153.0	0.0	0.0	0.0	20.6	31
Cargill 3477	E 2X	152.9	0.0	0.8	0.0	16.7	24
Top Farm SX1099	M 2X	152.2	0.0	0.0	0.0	17.5	28
Garst 8808	E 2X	151.1	0.0	0.0	0.0	16.4	27
Pioneer 3772	E 2X	150.3	0.0	0.0	0.0	14.8	23
Betagold Ingrid	E 2X	149.9	0.0	0.0	0.0	15.3	26
Terra TR880	E 2X	149.9	0.0	0.0	0.0	19.7	32
AgriPro AP148	E 2X	148.3	0.0	0.0	0.0	15.3	30
Horizon 4090	E 2X	143.2	0.0	0.0	0.0	15.4	33
SDAES Check 10	E 2X	115.5	0.0	0.0	0.0	16.3	34
Means		159.5		0.1		17.2	
LSD(.05)		15.8				CV - 6.1 %	

Table 22. 1988 Corn Performance Trial, Area C1(Irrigated-late), Redfield, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Horizon 7113	M 2X	194.6	0.0	0.0	0.0	23.4	1
Interstate 593A	L 2X	184.1	0.0	0.0	0.0	21.6	2
Terra TR1040	M 2X	182.7	0.0	0.0	0.0	22.2	3
McCurdy 5750	M 2X	175.6	0.0	0.0	0.0	22.6	6
Curry SC1445	M 2X	175.6	0.0	0.4	0.0	21.2	4
Interstate 543	M 2X	174.1	0.0	0.0	0.0	21.4	5
Cargill 5157	M 2X	172.0	0.0	0.0	0.0	22.1	9
DeKalb DK535	M 2X	170.1	0.0	0.0	0.0	20.6	8
Jacques 4900	M 2X	169.8	0.0	0.0	0.0	19.9	7
DeKalb DK524	M 2X	169.1	0.0	0.0	0.0	20.4	10
Tecnagene DF6805	M 2X	168.3	0.0	0.0	0.0	20.4	11
Garst 8708	M 2X	168.3	0.0	0.0	0.0	21.0	12
Jacques 5700	M 2X	168.1	0.0	0.0	0.0	21.5	13
Cargill 4227	M 2X	163.2	0.0	0.4	0.0	20.8	14
Betagold Hanna	L 2X	163.0	0.0	0.0	0.0	21.1	16
Northrup King N4545	M 2X	162.5	0.0	0.0	0.0	20.5	15
Northrup King S4590	L 2X	161.6	0.0	0.0	0.0	20.8	17
Tecnagene DF6802	M 2X	161.3	0.0	0.0	0.0	21.1	19
McCurdy 4925	M 2X	160.6	0.0	0.0	0.0	20.5	18
Top Farm SX1106	M 2X	160.3	0.0	0.0	0.0	20.8	20
AgriPro AP364	M 2X	160.1	0.0	0.0	0.0	20.8	21
McCurdy 86-21	M 2X	158.5	0.0	0.0	0.0	22.0	23
Horizon 6101	M 2X	158.0	0.0	0.0	0.0	21.1	22
Conti 8650	M 2X	155.1	0.0	0.0	0.0	21.7	24
Tecnagene DF8812	M 2X	154.2	0.0	0.0	0.0	26.8	25
Supercrost 2445	L 2X	141.5	0.0	0.0	0.0	24.0	29
Top Farm SX1103	M 2X	139.2	0.0	0.0	0.0	20.5	27
Supercrost 2277	L 2X	139.0	0.0	0.0	0.0	19.9	26
SDAES Check 9	L 2X	138.5	0.0	0.0	0.0	21.0	28
Terra TR103E	M 2X	122.1	0.0	0.5	0.0	19.7	30
Means		162.4		0.0		21.4	
LSD(.05)		25.0				CV - 9.5 %	

Table 23. Area C1(Irrigated-early) 1985-1988 Yield, Moisture And Stalk Lodging
Averages of Corn Hybrids, James Valley Research Center, Redfield, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Betagold Ingrid		164	160		3	3		17	16
DeKalb DK464			156			0			17
Horizon 4090	149	155	151	3	1	1	17	17	15
Interstate IS463			155			1			16
Interstate IS523			160			1			17
Northrup King S4350			186			0			18
Northrup King S4502		180	180		0	0		20	18
Pioneer 3737	168	170	167	0	0	0	18	18	16
SDAES Check 10	126	121	122	2	1	0	20	20	17
Top Farm SX1099	157	157	157	0	0	0	20	20	18
Top Farm SX1102			183			1			18

Table 24. Area C1(irrigated-late) 1985-1988 Yield, Moisture and Stalk Lodging
Averages of Corn Hybrids, James Valley Research Center, Redfield, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Cargill 5157			178			0			20
DeKalb DK524	170	168	171	1	1	1	23	23	20
Horizon 6101		168	159		2	3		22	20
Interstate IS543			166			2			20
Interstate IS593A			178			0			22
McCurdy 5750	188	195	191	1	1	1	25	24	22
SDAES Check 9		153	149		0	0		24	21
Terra TR103E			137			1			19
Top Farm SX1106			160			5			20

Table 25. Area C1(Dryland-early) 1985-1988 Yield, Moisture and Stalk Lodging
Averages of Corn Hybrids, James Valley Research Center, Redfield, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Asgrow/O's Gold RX49			139			0			18
Betagold Erika			120			0			16
Betagold Ingrid		142	140		2	1		18	17
DeKalb DK464			133			0			17
Horizon 4090	137	136	134	2	1	1	17	18	16
Interstate IS463			131			0			17
Interstate IS523			133			0			17
Interstate IS543			144			0			19
Pioneer 3737	146	148	137	1	1	1	19	19	17
SDAES Check 10	112	112	102	5	6	3	19	19	17
SeedTec KX5400			150			0			19
Top Farm SX1099		115	106		0	0		21	18
Top Farm SX1102			148			0			18

Table 26. 1988 Corn Performance Trial, Area C1(Dryland-early), Redfield, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Phoenix PH2501	M 2X	129.8	0.0	0.0	0.0	18.9	1
Betagold Karla	E 2X	128.5	0.0	0.0	0.0	19.0	2
SeedTec ST7255	E 2X	125.8	0.0	0.0	0.0	19.0	5
Top Farm SX1102	M 2X	125.5	0.0	0.0	0.0	18.8	6
Dahlgren DC-440	E 2X	124.7	0.0	0.0	0.0	15.8	3
Betagold Ingrid	E 2X	124.1	0.0	0.0	0.0	16.9	4
Phoenix PH2391	E 2X	123.2	0.0	0.0	0.0	16.5	7
Interstate IS543	E 2X	123.0	0.0	0.0	0.0	19.6	9
Sigco 1701	M 2X	122.5	0.0	0.0	0.0	19.7	10
SeedTec ST5400	M 2X	121.2	0.0	0.0	0.0	19.3	12
Interstate IS523	E 2X	120.5	0.0	0.0	0.0	17.8	11
Top Farm SX1101	E 2X	120.4	0.0	0.0	0.0	16.2	8
Pioneer 3737	E 2X	118.1	0.0	0.0	0.0	18.7	13
Asgrow/O's Gold RX498	M 2X	114.2	0.0	0.0	0.0	19.2	16
Terra TR95E	E 2X	113.1	0.0	0.0	0.0	17.9	15
Asgrow/O's Gold RX406	M 2X	113.0	0.0	0.0	0.0	17.2	14
Pioneer 3751	E 2X	111.0	0.0	0.0	0.0	16.1	17
Sigco 1799	M 2X	110.1	0.0	0.0	0.0	19.9	21
Cargill 3027	E 2X	109.7	0.0	0.0	0.0	16.4	18
Terra TR975	E 2X	109.4	0.0	0.0	0.0	19.8	22
Pioneer 3615	M 2X	108.8	0.0	0.0	0.0	17.5	19
Phoenix PH2432	M 2X	105.3	0.0	0.0	14.6	20	
Curry SC1405	E 2X	104.8	0.0	0.0	0.0	17.3	24
AgriPro AP175	M 2X	104.6	0.0	0.0	0.0	16.6	23
DeKalb DK464	E 2X	104.5	0.0	0.0	0.0	18.5	25
Terra TR880	E 2X	103.3	0.0	0.0	0.0	19.5	27
Interstate IS463	E 2X	102.3	0.0	0.0	0.0	17.8	26
Horizon 4090	E 2X	99.7	0.0	0.0	0.0	16.8	28
Cargill 3327	E 2X	99.2	0.0	0.0	0.0	18.4	29
AgriPro AP148	M 2X	97.3	0.0	0.0	0.0	18.1	30
Betagold Erika	E 2X	96.3	0.0	0.7	0.0	16.8	31
Pioneer 3772	E 2X	94.3	0.0	0.0	0.0	15.1	32
Sigco 1793	E 2X	94.2	0.0	0.0	0.0	17.7	34
Cargill 3477	E 2X	92.1	0.0	0.0	0.0	14.9	33
SDAES Check 10	E 2X	84.5	0.0	0.0	0.0	18.5	35
Top Farm SX1099	E 2X	63.4	0.0	0.0	0.0	19.4	36
Means		109.5		0.0		17.8	
LSD(.05)		19.1			CV -	10.8 %	

Table 27. 1988 Corn Performance Trial, Area C1(Dryland-late), Redfield, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Supercroft Exp.8110	L 2X	146.1	0.0	0.0	0.0	23.2	1
Dahlgren DC-502	M 2X	138.0	0.0	0.0	0.0	19.5	2
Interstate 543	M 2X	134.2	0.0	0.0	0.0	20.4	3
Horizon 6101	M 2X	131.9	0.0	0.0	0.0	21.2	4
Top Farm SX1103	M 2X	129.3	0.0	0.0	0.0	20.9	6
SeedTec ST7344	M 2X	129.1	0.0	0.0	0.0	20.7	5
Conti 8650	M 2X	128.7	0.0	0.0	0.0	21.3	7
Supercroft 2989	L 2X	125.4	0.0	0.0	0.0	22.1	8
Terra TR1040	M 2X	121.5	0.0	0.0	0.0	22.2	9
SeedTec ST7446	M 2X	118.5	0.0	0.0	0.0	22.4	10
Terra TR1125	L 2X	115.1	0.0	0.0	0.0	23.3	14
Interstate 593A	L 2X	114.7	0.0	0.0	0.0	23.8	15
Curry SC1446	M 2X	114.4	0.0	0.0	0.0	21.3	11
Supercroft 1999	L 2X	112.6	0.0	0.0	0.0	20.0	12
AgriPro AP364	M 2X	112.3	0.0	0.0	0.0	20.6	13
Cargill 4227	M 2X	110.3	0.0	0.0	0.0	22.1	16
Cargill 5157	M 2X	107.8	0.0	0.0	0.0	22.2	17
Betagold Maria	L 2X	106.8	0.0	0.0	0.0	23.1	18
Top Farm SX1106	M 2X	103.3	0.0	0.0	0.0	19.7	19
Curry SC1448	M 2X	94.6	0.0	0.0	0.0	19.7	20
DeKalb DK524	M 2X	94.2	0.0	0.0	0.0	19.6	21
SDAES Check 9	L 2X	74.3	0.0	0.0	0.0	23.3	22
Means		116.5		0.0		21.5	
LSD(.05)		23.1				CV - 12.2%	

Table 28. Area C1(dryland-late) 1985-1988 Yield, Moisture and Stalk Lodging
Averages of Corn Hybrids, James Valley Research Center, Redfield, SD

Brand and Variety	Acre Yield, B/A			Stk Lodging, Pct			Grain Moist, Pct		
	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr	4-Yr	3-Yr	2-Yr
Cargill 5157			162			0			21
Dahlgren DC502			154			1			18
DeKalb DK524		134	126		2	0		22	19
Horizon 6101		153	151		0	0		22	20
Interstate IS543			150			0			20
Interstate IS593A			147			1			22
SDAES Check 9	121	123	106	2	1	1	24	24	22
Supercroft 2989			149			0			20
Terra TR1040		155	152		0	0		24	22
Top Farm SX1106			142			0			19

Table 29. 1988 Corn Performance Trial, Area D2(early), Watertown, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
SeedTec ST7212	E 2X	69.9	0.0	2.9	0.0	23.7	1
Northrup King N4350	E 2X	68.9	0.0	0.0	0.0	31.7	2
Dahlgren DC-440	E 2X	67.9	0.0	1.8	0.0	29.7	3
Betagold Ingrid	E 2X	65.9	0.0	0.6	0.0	31.1	5
Sigco 1793	E 2X	64.7	0.0	0.0	0.0	27.2	4
Interstate IS463	E 2X	59.8	0.0	1.2	0.0	27.4	6
Pioneer 3737	E 2X	59.1	0.0	1.7	0.0	34.0	10
Tecnagene DF4894	E 2X	58.0	0.0	0.0	0.0	32.1	9
Pioneer 3772	E 2X	57.5	0.0	0.6	0.0	24.8	7
AgriPro 270	E 2X	56.9	0.0	0.6	0.0	25.3	8
AgriPro AP148	E 2X	56.5	0.0	1.1	0.0	29.1	11
Phoenix PH2391	E 2X	54.0	0.0	0.0	0.0	30.7	12
Cargill 3027	E 2X	51.5	0.0	0.0	0.0	29.4	13
Garst 8882	E 2X	48.9	0.0	1.7	0.0	34.7	15
Garst 8939	E 2X	46.3	0.0	2.3	0.0	32.8	17
Cargill 3477	E 2X	45.9	0.0	1.1	0.0	25.4	14
Conti 8304	E 2X	45.7	0.0	2.9	0.0	29.4	16
Northrup King N3624	E 2X	44.8	0.0	0.0	0.0	31.3	19
Interstate IS406	E 2X	44.3	0.0	0.6	0.0	30.0	18
Pioneer 3751	E 2X	43.3	0.0	0.6	0.0	35.9	23
Tecnagene DF4893	E 2X	42.5	0.0	1.8	0.0	31.4	21
Cargill 3327	E 2X	41.8	0.0	0.6	0.0	34.4	24
Interstate IS443	E 2X	39.8	0.0	0.0	0.0	34.2	26
Dahlgren DC-430	E 2X	39.8	0.0	0.0	0.0	26.0	20
Sigco 1588	E 2X	38.7	0.0	0.0	0.0	26.3	22
AgriPro AP077	E 2X	38.6	0.0	0.6	0.0	28.9	25
Tecnagene DF4890	E 2X	35.8	0.0	0.6	0.0	29.0	27
SDAES Check 10	E 2X	33.5	0.0	0.6	0.0	33.7	29
Tecnagene DF2886	E 2X	33.3	0.0	0.0	0.0	26.8	28
Conti 8455	E 2X	32.3	0.0	0.0	0.0	35.1	30
Means		49.5		0.5		30.1	
LSD(.05)		17.2			CV -	24.9 %	

Table 30. 1988 Corn Performance Trial, Area D2(late), Watertown, SD

Brand and Variety	Type and Cross	Yield B/A	Pct. Root Lodged	Pct. Stalk Lodged	Pct. Ears Dropped	Percent Moisture	Performance Score Rating
Interstate 543	M 2X	94.7	0.0	0.6	0.0	35.0	1
Interstate 523	M 2X	84.5	0.0	0.0	0.0	32.7	2
Cargill 4227	M 2X	80.6	0.0	0.6	0.0	34.2	3
Cargill 5157	M 2X	79.5	0.0	0.0	0.0	35.0	4
Betagold Karla	M 2X	77.5	0.0	0.0	0.0	35.3	5
SeedTec ST7255	M 2X	72.6	0.0	1.7	0.0	38.3	7
Garst 8808	E 2X	72.1	0.0	0.0	0.0	29.2	6
Tecnagene DF6802	M 2X	67.1	0.0	1.9	0.0	35.4	9
Dahlgren DC-502	M 2X	66.7	0.0	0.0	0.0	32.3	8
Betagold Kristine	M 2X	48.0	0.0	0.7	0.0	39.4	10
SDAES Check 9	L 2X	40.3	0.0	1.3	0.0	45.7	11
Means		71.2		0.5		35.7	
LSD(.05)		20.5			CV -	20.2 %	

Table 31. Entries Included in 1988 Trial and Tables where the Results Appear.

Company and Brand	Entry	Tables	Company and Brand	Entry	Tables
Agripro/Sokota	270	17,29	Dahlgren Co.	DC440	13,17,20,26,29
PO Box 237	680	9	PO Box 609	DC502	14,18,27,28,30
Mission, KS 66201	AP077	29	Crookston, MN 56716	DC527	9
"Agripro"	AP148	17,21,26,29	"Dahlgren"	DC535	5,10
	AP175	13,14,17,21,26		DC541	7,10
	AP364	5,9,14,16,18,22,27		DC545	7,8
	HP470	25		DC430	29
Asgrow Seed Co.	RX406	13,15,17,20,21,23,25,26	DeKalb-Pfizer Genetics	DK415	13,15,17,20
7000 Portage Road	RX498	13,15,17,20,21,23,25,26	3100 Sycamore Road	DK435	13
Kalamazoo, MI 49001	RX578	5,6,9,11,18	DeKalb, IL 60115	DK464	13,17,20,21,23,25,26
"Asgrow/O's Gold"	RX626	5,6,10	"DeKalb-Pfizer"	DK524	9,11,18,19,22,24,27,28
	RX746	7,14		DK535	5,22
				DK547	5,9,11
BetaSeed, Inc.	Erika	17,25,26		DK636	7,8,10,12
PO Box 195	Hanna	5,6		T1100	7,8
Shakopee, MN 55379	Ingrid	13,15,17,20,21,23,25,26,29	Fontanelle Hybrids	4030	5,6
"Betagold"	Karla	5,13,18,21,26,30	Rt. 1, Box 18	4035	5
	Kristine	21,30	Nickerson, NE 68044	4230	5,6
	Maria	5	"Fontanelle"	4280	7,8
Cargill Seeds	3027	17,21,26,29	E. J. Funk & Sons	1637	13
PO Box 5645	3327	13,17,21,26,29	PO Box 67	1999	27
Minneapolis, MN 55440	3477	13,17,21,26,29	Kentland, IN 47951	2277	18,22
"Cargill"	4227	14,18,22,27,30	"Supercroft"	2445	14,18,22
	5157	14,16,18,21,24,27,28,30		2989	7,8,10,27,28
	5927	9,14		4386	7,10
	6127	5,6,9,11		EX8110	7,10,14,27
	6227	5,9			
	6927	7,10			
	7877	7,10	Garst Seed Co.	0882	13,18
	7993	7	RR 4	8555	7,10
ContiSeed	8304	17,29	Cherokee, IA 51012	8708	5,9,14,22
702 3rd Street, SW	8455	17,29	"Garst"	8808	14,18,21,30
Huron, SD 57350	8650	9,14,22,27		8882	13,17,21,29
"Conti"	8707	7		8939	17,29
Crow's Hybrid Corn Co.	175	13	Green Acres	929	10
PO Box 306	195	13	RR 2	2179	10
Milford, IL 60953	210	14,16	Hartington, NE 68739	3000	10
"Crow's"	344	5,6	"Green Acres"	3004	10
	488	7,8		3318	10
Curry Seed Co.	1405	26	Hawkeye Hybrids	SX43	5,6
PO Box 517	1423	14,16	Rt. 3, Box 416	SX56	7,8
Elk Point, SD 57025	1445	14,22	Pella, IA 50219		
"Curry"	1446	14,27	"Hawkeye"		
	1448	27			
	1464	5	Hoegemeyer Hybrids	SX2559	9,13,15
	1479	7,8	RR 2	SX2566	5,69,11,13,15
	1480	7,8	Hooper, NE 68031	SX2617	5,10,14
			"Hoegemeyer"	SX2628	5
				SX2632	7,8
				SX2673	7
Custom Farm Seeds	2223	17			
PO Box 160	5510	17			
Momence, IL 60954	93031	24			
"CFS"	W4052	14,16,18			

Table 31 (Continued)

Company and Brand	Entry	Tables	Company and Brand	Entry	Tables
Horizon Seeds	4090	13,15,17,20,21,23,25,26	Phoenix Seed, Inc.	PH2391	17,26,29
PO Box 81823	4111	9,11	717 S. 14th St.	PH2432	17,26
Lincoln, NE 68501	6101	9,11,14,16,22,24,27,28	Fargo, ND 58103	PH2501	26
"Horizon"	7113	7,22	"Phoenix"		
Interstate Seed Co.	IS406	17,29	Pioneer Hi-Bred, Int.	3379	5,9
PO Box 338	IS443	13,17,29	120 SE Willmar Ave.	3475	5,6,9,11
W. Fargo, ND 58078	IS463	17,20,21,25,26,29	Willmar, MN 56201	3569	5,6,9,11
"Interstate"	IS523	13,15,18,19,21,23,25,26	"Pioneer Brand"	3585	5,9,13
	IS543	5,6,9,11,13,14,15,16,18,19		3615	5,6,9,11,13,17,21,26
	IS543	21,22,24,25,26,27,28,30		3737	13,15,21,23,25,26,29
	IS593A	5,6,9,11,14,16,22,24,27,28		3751	13,17,21,26,29
	IS613	5,6,7,8,9,11,12		3772	17,21,26,29
	IS663	7,10			
Jacques Seed Co.	4170	17	J.C. Robinson Seed Co.	H2343	14
720 St. Croix St.	4700	17	3rd St. & Hwy 64	H2486	7
Prescott, WI 54021	4900	14,22	PO Box A	Ex615	5
"Jacques"	5700	14,22	Waterloo, NE 68069	Ex708	13
	6770	7	"Golden Harvest"	Ex723	14
	7770	7			
	7820	7	Schechinger Seed Co.	SS-43A	14
Kaltenberg Seed Farms	K5200	5	RR 1	SS-44	5,9,14
RR 2	K6300	5,6	Harlan, IA 51537	SS-57A	7,10
Waunakee, WI 53597	K7400	7,8	"S Brand"	SS-54A	7,10
"Kaltenberg"	K7500	7,8		SS-62A	7,10
				SS-60C	7,10
Lincoln Seed Co.	ex105	5,9	SeedTec, Intn'l	ST3400	13,15,17,20
211 Pearl St.	5422	7,10	Route 108W	ST5400	25,26
Sioux City, IA 51101			Eldred, IL 62027	ST6800	9,11
"Lincoln"			"SeedTec"	ST7212	17,29
				ST7255	14,26,30
McCurdy Seed Co.	4925	10,14,22		ST7344	10,14,27
East Main, Box 66	5750	10,12,14,16,22,24		ST7446	27
Fremont, IA 52561	6660	7	Sigco Research	1588	17,29
"McCurdy"	86-21	10,14,22	PO Box 289	1701	5,9,13,21,26
			Breckenridge, MN 56520	1793	17,21,26,29
NC+	4131	5,6,9,11	"Sigco"	1799	13,21,26
PO Box 4408	4616	7,10		1814	5,9
Lincoln, NE 68504	5990	7,8,10,12			
"NC+"			A.C. Stengel & Sons	GV247	17,20
Northrup King Co.	N3624	13,17,21,29	RR 1, Box 315	GV282	17
1754 Park Blvd.	N4350	13,15,17,20,21,23	Milbank, SD 57252	GV2921	17
Fargo, ND 58103	S4502	21,23	"Golden Valley"	GV2960	13,18
"Northrup King"	N4545	5,9,14,22		GV2981	13,18
	S4590	14,22			
	S5340	5,8,10,12	Tecnagene Seeds	DF2886	29
	S5750	5	PO Box 1325	DF4890	29
	N6348	7	Watertown, SD 57201	DF4893	13,29
	S7751	7,8,10	"Tecnagene"	DF4894	13,29
				DF6802	5,14,21,29
Pfister Hybrid Co.	2250	5		DF6803	9
PO Box 187	2300	5		DF6805	5,7,14,22
El Paso, IL 61738				DF6807	5,9,14
"Pfister"				DF8812	7,10,22
				DF8814	7,10

Table 31. Continued)

Company and Brand	Entry	Tables
Terra International	TR880	13,21,26
600 4th Street	TR95E	13,21,26
Sioux City, IA 51101	TR975	13,21,26
"Terra"	TR103E	5,9,11,14,22,24
	TR1040	5,6,9,14,16,22,27
	TR1120	7,8,9
	TR1125	7,10,27
	TR164E	5,9
Top Farm Hybrids	TF1195A	17
PO Box 850	TF1099	9,11,18,19,21,23,25,26
Cokato, MN 55321	TF1195	17
"Top Farm"	TF1101	9,18,21,26
	TF1102	9,11,18,19,21,23,25,26
	TF1103	10,22,26
	TF1106	5,6,10,12,22,24,27,28
	TF1109	5,6
	TF1112	7,8
Wilson Hybrids, Inc.	1500b	5,6,9
PO Box 391	1640	7,8,10,12,
Harlan, Ia 51537	1670	7,10
"Wilson"		